FROM THE EDITORS

Editor's Introduction: Exploring Unplanned Transfer, Innovations in Catheter Placement, and More on Biocompatible Solutions

High-quality registries are key to exploring variations in practice patterns and outcomes for patients on peritoneal dialysis (PD). An excellent example is the French PD Registry, and in this issue, Boissinot *et al.* describe a study of patients transferring to hemodialysis from PD. For 37 of 60 patients, the transfer was unplanned, which is concerning, because unplanned transfer is associated with the use of central venous catheters and poorer patient outcomes. Given that peritonitis was the most common cause of unplanned transfer, it is difficult to know how such transfers can be predicted—although patients who had experienced more than 2 peritonitis episodes were at higher risk. The authors argue that unplanned transfer could have been avoided in 6 of the 37 cases. Could rates of unplanned transfer to hemodialysis be used as a measure of quality of care?

The placement of PD catheters is a subject frequently discussed in the pages of this journal, and an innovative addition to the literature on that topic comes in the form of a description of a single-port laparoscopy technique by Santarelli and colleagues from Jesi, Italy. The authors used this approach for patients who had undergone prior abdominal surgery because it permits direct visualization of the catheter within the pelvis and also allows for adhesiolysis to be performed when necessary. Elsewhere in this issue, a short report from West Bengal by Golay *et al.* describes the use of ultrasonography to facilitate percutaneous catheter insertion.

The role of dialysis solutions low in glucose degradation products (GDPs) has been extensively debated. A prospective 1-year study of a cohort of incident continuous ambulatory PD patients by Cho *et al.* from Yeungnam University and Kyungpook National University in South Korea provides further evidence of reduced ultrafiltration associated with such solutions, adding to the findings of other researchers. Intriguingly, peritoneal equilibration tests (PETs) in the Korean study showed increased glucose absorption from dialysate in the low-GDP group in the absence of a difference in the 4-hour dialysate-to-plasma

ratio of creatinine. There was no demonstrated difference in volume status measured using bioelectrical impedance between the groups, and both patient groups had well-preserved residual renal function. The low-GDP group also showed significantly higher dialysate levels of interleukin 6 and cancer antigen 125. The biologic significance of cancer antigen 125 is explored in detail by Cheema and Bargman from Toronto in an accompanying review.

Since first being described by Zbylut Twardowski in 1989 (1), the PET has proved to be an essential tool to facilitate prescription management and diagnosis—and to explore the factors that affect outcome—in patients on PD. The attraction of the PET has been its simplicity, but the information gained is essentially confined to solute transport and ultrafiltration volume. Several variations that are more sophisticated have been described, including the Personal Dialysis Capacity test (2) and the double mini-PET (3). In this issue of *Peritoneal Dialysis International*, an international consortium led by Jacek Waniewski describes a variation of the test conducted over 3 separate days of therapy, in which the glucose concentration of the dialysate is varied to allow for a determination of osmotic conductance, ultrafiltration efficiency, and peritoneal fluid absorption. Although the authors state that their approach is relatively simple, I suspect that this test will remain the territory of those with a sophisticated understanding of the factors that influence ultrafiltration.

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Editor-in-Chief

REFERENCES

1. Twardowski ZJ. Clinical value of standardized equilibration tests in CAPD patients. *Blood Purif* 1989; 7:95–108.
2. Johansson AC, Haraldsson B. Physiological properties of the peritoneum in an adult peritoneal dialysis population over a three-year period. *Perit Dial Int* 2006; 26:482–9.
3. La Milia V, Di Filippo S, Crepaldi M, Del Vecchio L, Dell'Oro C, Andrulli S, *et al.* Mini-peritoneal equilibration test: a simple and fast method to assess free water and small solute transport across the peritoneal membrane. *Kidney Int* 2005; 68:840–6.

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